

Date: Sat, 25 Jun 94 02:03:33 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V94 #702
To: Info-Hams

Info-Hams Digest Sat, 25 Jun 94 Volume 94 : Issue 702

Today's Topics:

 "Renewal" reusable alkaline batteries
 'OK' Place to ham (Czech Rep.)
 ARLD037 DX news
 Chicago goes LIVE on 7/31/94!
 Examination Opportunities
 F.A.R.E. 1994 IS COMING SOON!
 Field Day
 IPS Daily Report - 24 June 94
 June 26th
 need info on Helical filters design
 RFI re: words for alphabet
Transmission Line Impedance: Why so many? (2 msgs)
 Tunnel Radio Help Request
 W6BHZ!

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 24 Jun 94 13:00:09 EDT
From: dog.ee.lbl.gov!agate!darkstar.UCSC.EDU!news.hal.COM!olivea!
channel.ecst.csuchico.edu!yeshua.marcam.com!zip.eecs.umich.edu!
newsxfer.itd.umich.edu!gatech!nntp.msstate.edu!@ihnp4.ucsd.edu
Subject: "Renewal" reusable alkaline batteries
To: info-hams@ucsd.edu

In article <2u9je2\$pgo@search01.news.aol.com>, dgoodman@aol.com (DGoodman) writes:
> In article <1994Jun21.171233.9272@hayes>, bcoleman@hayes.com (Bill

> Coleman) writes:
>
>>Nicad memory is largely a thing of myth.
>
> I've lived with nicads of all kinds for years, and have found the
> myth to be reality.

While I don't doubt for a moment you've had nicad failures, I seriously doubt that those failures were due to memory.

There are a host of other abuses you can put to nicads to cause them to fail. Many of them are much easier to produce than nicad memory. You need dozens of cycles to cause memory. Modern nicads may need hundreds of equal cycles. Most hams who claim "memory" had failures after a couple of cycles. Can't happen.

Case in point. I used the same electric shaver for nearly 10 years. Every day, I'd shave for roughly the same length of time. Even after 10 years of daily 2-3 minute cycles, the same nicads were still good for a weeks worth of shaves.

Nicad "memory" is extremely rare.

--
Bill Coleman, AA4LR ! Internet: bcoleman@hayes.com
Principal Software Engineer ! AppleLink: D1958
Hayes Microcomputer Products, Inc. ! CIS: 76067,2327
POB 105203 Atlanta, GA 30348 USA !
Disclaimer: "My employer doesn't pay me to have opinions."
Quote: "The same light shines on vineyards that makes deserts." -Steve Hackett.

Date: 24 Jun 1994 16:04:36 -0400
From: ihnp4.ucsd.edu!news.cerf.net!gopher.sdsc.edu!nic-nac.CSU.net!
charnel.ecst.csuchico.edu!yeshua.marcam.com!news.kei.com!
travelers.mail.cornell.edu!msc.cornell.edu!isaac@network.ucsd.edu
Subject: 'OK' Place to ham (Czech Rep.)
To: info-hams@ucsd.edu

I am a ham who just landed a job in Brno in the Czech Republic as an English teacher, and have some questions about hamming over there.

First of all, is it fairly easy to get a reciprocal license as an American to operate there? I asked the ARRL to send me a packet, but they haven't yet.

Will I be allowed to bring my IC-W2A over there? This HT can receive from about 100 - 1300 MHz and transmits on the 2 meter and 70cm bands. Unfortunately, it has been modified to transmit out of band, so it will

also transmit fairly far outside of band.

Do you know of clubs or contact people in the Brno area? I'm interested in getting in touch with a local club over there.

Thanks so much.

Isaac Trefz
isaac@msc.cornell.edu

Date: Thu, 23 Jun 1994 17:21:43 EDT
From: elroy.jpl.nasa.gov!swrinde!emory!europa.eng.gtefsd.com!sundog.tiac.net!
usenet.elf.com!rpi!psinnntp!arrl.org!usenet@ames.arpa
Subject: ARLD037 DX news
To: info-hams@ucsd.edu

SB DX @ ARL \$ARLD037
ARLD037 DX news

ZCZC AE35
QST de W1AW
DX Bulletin 37 ARLD037

Date: Fri, 24 Jun 1994 08:23:54
From: elroy.jpl.nasa.gov!swrinde!cs.utexas.edu!convex!news.onramp.net!
news.sprintlink.net!indirect.com!s146.phxslip.indirect.com!lenwink@ames.arpa
Subject: Chicago goes LIVE on 7/31/94!
To: info-hams@ucsd.edu

On WKTA, 1330am, in Chicago, Illinois, on July 31, 1994, The Ham
Radio & More show goes from tape delay at 9:00pm to LIVE LIVE LIVE
at 6:00pm Sundays. This will allow real time phone calls from Chicago as
well as WKTA's daytime power which covers most of the city and
suburbs. Call Kent at WKTA and thank him at 708-498-3350.

73,
Len

Date: Fri, 24 Jun 94 09:00:00 -0800
From: agate!darkstar.UCSC.EDU!news.hal.COM!olivea!charnel.ecst.csuchico.edu!
yeshua.marcam.com!usc!elroy.jpl.nasa.gov!netline-fddi.jpl.nasa.gov!nntp-
server.caltech.edu!news.claremont@ihnp4.ucsd.edu

Subject: Examination Opportunities
To: info-hams@ucsd.edu

JB>led 6/14/94 to 9/19/94
JB>Message-ID: <2DFE0D86@arrl.org>
JB>Newsgroups: rec.radio.amateur.misc

JB>Special Note: Amateur Radio licenses usually arrive between 8 and
JB> 10 weeks after the test session. The FCC considers their
JB> processing time to be 90 days--from the date they receive the
JB> application. The FCC usually receives the application one
JB> to two weeks after the test session (once the VE Team and the
JB> coordinating VEC have completed their processing).

I really think you need to change the above paragraph to reflect
the TRUE time frame that currently exists. I have been waiting 12
weeks now and there are reports of people waiting over 14 weeks who
still do not have their licenses yet! Also, when I called the ARRL
800 number for new hams, the gentleman who answered quoted me 16
weeks! So, get with it, quit giving out false information, and
start stating the real waiting period!!

≥ OLX 2.2 ≥ Darryl Linkow (818)346-5278 9 am - 5 pm PDT

Date: Fri, 24 Jun 1994 08:20:46
From: elroy.jpl.nasa.gov!swrinde!emory!europa.eng.gtefsd.com!sundog.tiac.net!
news.sprintlink.net!indirect.com!s146.phxslip.indirect.com!lenwink@ames.arpa
Subject: F.A.R.E. 1994 IS COMING SOON!
To: info-hams@ucsd.edu

After a very successful F.A.R.E. 1993, with close to 3,000 people
attending, F.A.R.E. 1994 will be bigger and better! F.A.R.E. is the
Family Amateur Radio Event happening on the ARRL's Ham Awareness
Day, Saturday, September 17, 1994. More children and spouses
attended last year's event than all other hamfests in Arizona combined!
Ronald McDonald appears for the kids, as well as face painting, bird
show, and so much more. There's a swap meet starting at sunrise and
the exhibit hall opens at 9:00am. Commercial exhibitors are there, as well
as "hands on" for all displays. Such as: soldering exhibits, cw sending,
packet, pactor, ATV, MARS station, HF station, The Red Cross Team,
The Salvation Army Emergency Radio Team, AMSAT, public service,
and so much more. E'mail me for more info.

73,

Len, KB7LPW kb7lpw@k7buc.az.usa.na
lenwink@indirect.com

Date: Fri, 24 Jun 1994 08:13:14
From: elroy.jpl.nasa.gov!swrinde!cs.utexas.edu!convex!news.onramp.net!
news.sprintlink.net!indirect.com!s146.phxslip.indirect.com!lenwink@ames.arpa
Subject: Field Day
To: info-hams@ucsd.edu

Good luck to all teams participating in Field Day. Have fun, too!

73,
Len, KB7LPW

Date: Fri, 24 Jun 1994 23:09:01 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!msuinfo!harbinger.cc.monash.edu.au!
news.cs.su.oz.au!metro!ipso!rwc@network.ucsd.edu
Subject: IPS Daily Report - 24 June 94
To: info-hams@ucsd.edu

SUBJ: IPS DAILY SOLAR AND GEOPHYSICAL REPORT
ISSUED AT 24/2330Z JUNE 1994 BY IPS RADIO AND SPACE SERVICES
FROM THE REGIONAL WARNING CENTRE (RWC), SYDNEY.
SUMMARY FOR 24 JUNE AND FORECAST UP TO 27 JUNE

IPS Disturbance Warning 17 was issued on 22 June and is current for
interval 24 June to 4 July

1A. SOLAR SUMMARY
Activity: low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 073/009

GOES satellite data for 23 June
Daily Proton Fluence >1 MeV: 7.3E+05
Daily Proton Fluence >10 MeV: 3.3E+04
Daily Electron Fluence >2 MeV: 3.2E+08
X-ray background: A1.7
Fluence (flux accumulation over 24hrs)/ cm2-ster-day.

1B. SOLAR FORECAST
25 June 26 June 27 June

Activity	Very low	Very low	Very low
Fadeouts	None expected	None expected	None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 075/013

1C. SOLAR COMMENT

The coronal hole that has been causing the recent lengthy disturbances appears weaker in xray images.

2A. MAGNETIC SUMMARY

Geomagnetic field at Learmonth: quiet

Estimated Indices : A	K	Observed A Index 23 June
Learmonth	03 2112 1011	
Fredericksburg	05	03
Planetary	06	05

Observed Kp for 23 June: 1110 1332

2B. MAGNETIC FORECAST

DATE	Ap	CONDITIONS
25 Jun	16	Unsettled to active.
26 Jun	20	Active.
27 Jun	20	Active.

2C. MAGNETIC COMMENT

Expected increase to active levels did not occur. However, active periods are still expected, even though hole appears weaker.

3A. GLOBAL HF PROPAGATION SUMMARY

	LATITUDE BAND		
DATE	LOW	MIDDLE	HIGH
24 Jun	normal	normal	normal

PCA Event : None.

3B. GLOBAL HF PROPAGATION FORECAST

	LATITUDE BAND		
DATE	LOW	MIDDLE	HIGH
25 Jun	normal	fair	poor
26 Jun	normal	fair	poor
27 Jun	normal	fair	poor

3C. GLOBAL HF PROPAGATION COMMENT

Degraded HF comms conditions expected after June 25.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were near predicted monthly values

Observed T index for 24 June: 25

Predicted Monthly T Index for June is 30.

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST

DATE	T-index	MUFs
25 Jun	20	Near predicted monthly values.
26 Jun	20	About 15% below predicted monthly values.
27 Jun	20	Near predicted monthly values.

4C. AUSTRALIAN REGION COMMENT

Strong sporadic E observed at times, spread F observed during local night. Due to geomagnetic activity not eventuating now expect mild depression on 26th. Degraded HF comms expected at times during interval June 24 - July 4.

--

IPS Regional Warning Centre, Sydney	IPS Radio and Space Services
email: rwc@ips.oz.au fax: +61 2 4148331	PO Box 5606
RWC Duty Forecaster tel: +61 2 4148329	West Chatswood NSW 2057
Recorded Message tel: +61 2 4148330	AUSTRALIA

Date: Fri, 24 Jun 1994 08:14:46
From: agate!howland.reston.ans.net!cs.utexas.edu!convex!news.onramp.net!
news.sprintlink.net!indirect.com!s146.phxslip.indirect.com!lenwink@ames.arpa
Subject: June 26th
To: info-hams@ucsd.edu

After Field Day, June 26, listen to Senator Barry Goldwater on the Ham Radio & More show on the Talk America Network. It airs at 6:00pm EST. Available in 23 cities and on satellite on spacenet 3, transponder 9, 6.8 audio. For more info, call 1-602-241-1510.

73,
Len

Date: Fri, 24 Jun 1994 19:54:26 GMT
From: ihnp4.ucsd.edu!swrinde!sdd.hp.com!col.hp.com!srngenprp!
glenne@network.ucsd.edu
Subject: need info on Helical filters design
To: info-hams@ucsd.edu

Arthur Chien - 4582 (achien@lsil.com) wrote:

: I am looking for information on how to design a "Helical filter" . Any books, papers or design equations available for this kind of filters?

See Chapter 9 of "Handbook of Filter Synthesis" (the big red book) by Anatol Zverev, published by John Wiley.

Glenn Elmore n6gn

amateur IP: glenn@SantaRosa.ampr.org
Internet: glenne@sr.hp.com

Date: Fri, 24 Jun 1994 19:44:59 GMT
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!math.ohio-state.edu!darwin.sura.net!
rsg1.er.usgs.gov!dgg.cr.usgs.gov!bodoh@network.ucsd.edu
Subject: RFI re: words for alphabet
To: info-hams@ucsd.edu

In article <2uesqd\$j9q@b11.b11.ingr.com> nsparker@ingr.com (Nick Parker) writes:
>Does anyone have a listing of the word equivalents for the alphabet
>(alpha=a, bravo=b, etc) they could post or email?

How about ;-)

a	aesop (esop)
b	
c	czar
d	djakarta
e	euphoria
f	
g	gnaw
h	honour
i	
j	juan
k	knowledge
l	
m	mnemonic
n	
o	oedipus
p	pseudo
q	qatar
r	
s	syzygy

t tzar
u urn
v
w wrong
x xylophone
y you
z
--

++++++
+ Tom Bodoh - Section Manager, Systems Engineering and Management, Hughes STX +
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198 (605) 594-6830 +
+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66) Amateur radio call; N0YGT +
+ "Welcome back my friends to the show that never ends!" EL&P
+
++++++

Date: Fri, 24 Jun 1994 15:21:58 GMT
From: elroy.jpl.nasa.gov!sdd.hp.com!hp-pcd!hpcvsnz!tomb@ames.arpa
Subject: Transmission Line Impedance: Why so many?
To: info-hams@ucsd.edu

David Drumheller (drumhell@claudette.nrl.navy.mil) wrote:
: In article <2u8ktb\$jcv@search01.news.aol.com>, NX7U <nx7u@aol.com> wrote:
: > [some (more) stuff deleted]
: >
: >1. For maximum power handling capability, $Z_0=35$ ohms (or so) is
: >optimum. That's why that standard value exists.
: >2. For minimum attenuation per unit length, $Z_0=75$ ohms (or so) is
: >optimum. That's why that value exists.
: >3. The compromise between these two optimum values is nearly 50 ohms
: >(geometric mean). Perhaps that's how that value came about...just my
: >guess.
: >

: Optimum with respect to what?

With respect to a fixed outer conductor diameter. You do have to be a little careful about the "max power handling capability." It depends on whether the line is voltage limited or temperature-rise limited. In a pulsed application, it may be voltage limited; for CW, it generally will be thermally limited.

And although (3.) may have been originally chosen as a compromise, it is also very close to the minimum attenuation (for fixed outer conductor diameter) configuration for lines with solid polyethylene dielectric, and close for solid Teflon.

All this also assumes the same resistivity for the inner and outer conductors, which isn't always the case; a higher resistivity in the outer conductor than in the inner shifts the minimum-attenuation impedance higher (though not much in practical cases like aluminum-outer, copper-inner).

73, K7ITM

Date: Fri, 24 Jun 1994 15:40:42 GMT
From: elroy.jpl.nasa.gov!sdd.hp.com!hp-pcd!hpcvsnz!tomb@ames.arpa
Subject: Transmission Line Impedance: Why so many?
To: info-hams@ucsd.edu

NX7U (nx7u@aol.com) wrote:

: 1. For maximum power handling capability, $Z_0=35$ ohms (or so) is
: optimum. That's why that standard value exists.

Since I've never actually seen any 35 ohm line that I'm aware of, I started wondering just how "standard" that standard value is. I looked in a table of over 300 RG-xx/U cables, and found only one below 35 ohms (RG-73/U, at 25 ohms), and three around 35 ohms (RG's 83, 100 and 264). The next lowest impedance was 48 ohms, with a big cluster from 48 to 52 ohms (most nominally 50), and another big cluster from 72 to 78 or so. But there are some in the 60's and 90's, and a couple above 100; the highest normal line was 150 ohms, and some spiral-inner-conductor delay lines were in the 950-1530 ohm region.

Of course, if you have deep enough pockets, you can get a cable made for you in any impedance you want probably from below 10 ohms to perhaps 150 or very slightly above (for straight line, not spiral conductor). But the "standard" values do cover the range pretty well. On the other hand, if you want one of the rarer ones, you may have to buy a whole production run of it...

73, K7ITM

Date: 24 Jun 1994 23:50:20 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!library.ucla.edu!europa.eng.gtefsd.com!
sundog.tiac.net!news.sprintlink.net!bga.com!patm@network.ucsd.edu
Subject: Tunnel Radio Help Request
To: info-hams@ucsd.edu

Redvers Llewellyn Davies (zcapl34@ucl.ac.uk) wrote:
: >In article <2u7o6b\$8lq@nyx10.cs.du.edu> whester@nyx10.cs.du.edu (William R.
Hester) writes:

: >>
: >>I have a work project and I am looking for someone with some real world
: >>experience and/or advice in sending RF through underground tunnels.

I know that spelunkers (cave explorers) use VLF frequencies for
communications from the surface to the cave. They certainly can't avail
themselves of preinstalled leaky coax, etc.

There is a publication devoted to this topic called "Speleonautics". At the
moment, I don't have access to the address, but will track it down and
post it. You can also probably track it down at your university's library.

Patrick McGuire WA8PLR
Austin TX
patm@bga.com

Date: 24 Jun 1994 17:42:20 -0700
From: ihnp4.ucsd.edu!news.cerf.net!ccnet.com!ccnet.com!not-for-
mail@network.ucsd.edu
Subject: W6BHZ!
To: info-hams@ucsd.edu

Kirk Smith (ksmith@theodolite.ae.calpoly.edu) wrote:
: W6BHZ on the Internet

: Listen for us on 146.52 as well, we will be line of sight to most of the
: hills in the bay area as well as Fresno area. We will be running packet on
: 145.03. Possibly ATV on 443.00 or 439.25, so you can watch for us too!

: The Cal Poly Amateur Radio Club is now running a mailing list for members,
: alumni and any others that are interested. There are about 45 people now
: on this list, including 21 alumni! This interest has started a quest for W6BHZ
: alumni, and about 320 names have been compiled so far!

: Please send responses to this mailing to:
: w6bhz-request@oboe.aix.calpoly.edu

: W6BHZ on the World Wide Web

: The W6BHZ World Wide Web Home Page is growing in popularity as well. Since
: May 1st, the W6BHZ home page was the 9th most requested document on the Cal

: Poly WWW server! A combined total of 2216 requests have been processed for
: all of the W6BHZ documents. Take a look at the original request for club
: recognition submitted in 1947. It's been electronically preserved for all to
: see on the WWW. I'd like to encourage everyone to submit pointers for
: inclusion on the page. Also, submit our pointer to your local WWW servers
: and anywhere else that may get us exposure. Let's make W6BHZ known! I've
: been averaging about 2 new alumni per week that are responding to the WWW
: page. Here's our URL:

: <http://www.calpoly.edu/~dmalone/w6bhz>

: FIELD DAY 1994: (This information can also be found on the WWW)

: We will be heading up to the fire lookout tower on Hi Mountain again this
: year. Hi Mountain is located in the Los Padres National Forest, near
: San Luis Obispo, California.

: This is almost exactly where we will be:

: Longitude: 120 Degrees 25 Minutes North

: Latitude: 35 Degrees 15 Minutes West

: Altitude: 3180 Feet

: We will be running 2 Alpha in Santa Barbara.

: Everyone is welcome to come and visit. Talk in will be on 444.525+ (p1127.3)
: or 146.52 (simplex). If we don't respond, send a DTMF "123" on 146.52 to get
: our attention. There is a gate we will have to come down and open for you.

: Listen for our call on 40 meters (7.225-7.245) at the following times:

: (All times Pacific Daylight Time)

: 12:00pm 4:00pm 8:00pm 12:00am 4:00am 8:00am

I sure hope you find crystals for 427.25 and 434.00 so we can see you on ATV

Bob

--

Bob Wilkins
Berkeley, California
94701-0710

work bwilkins@cave.org
home rwilkins@ccnet.com
play n6fri@n6eeg.#nocal.ca.usa.noam

Date: (null)
From: (null)

Date: Fri, 24 Jun 1994 11:47:54 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!
usenet.ins.cwru.edu!nshore!seastar!jjw@network.ucsd.edu
To: info-hams@ucsd.edu

References <940622043027703@michaelr.com>, <2u9ji1\$pi0@search01.news.aol.com>,
<3dF2kiubGky6066yn@access.digex.net>
Reply-To : jjw@seastar.seastar.org (John Welch)
Subject : Re: AEA IsoLoop - Opinion

As quoted from <3dF2kiubGky6066yn@access.digex.net> by domonkos@access.digex.net
(Andy Domonkos):

> In article <2u9ji1\$pi0@search01.news.aol.com>, DGoodman wrote:
> > In article <940622043027703@michaelr.com>, ray.wade@michaelr.com (Ray
> > Wade) writes:
> >
> > >Dummy loads are RREEAAALLLYYY quiet!
> >
> > But they won't let you work 230 countries with 100 watts.
> >
> > Danny Goodman AE9F/6
>
> Exactly my findings. If the IsoLoop isn't working for some reason, double
> check the installation and location. Remember, loop antennas were in use
> at the beginning of the radio era, so the designs and concepts are not
> new, but they are tried and tested. I've got mine in the attic and have been
> working world-wide DX w/better than average results.
>
> Andy N3LCW

We did double-check - it worked, but very poorly. Tried it on a
couple of bands with similar results.

Just for grins, last night my wife (WV9K) *did* use a short antenna
that worked nearly as well - an 8 inch alligator cliplead dangled off
a 50 ohm resistor. With 70 watts peak SSB, she got S-4 receive
reports from the 20M Maritime Mobile net control, and 3x3 reports from
Ohio and Alabama on the 40M 3905 Century Club net (we left early due
to a t-storm).

We've had *much better* luck with short wire dipoles thumbtacked to the ceiling, and they're *much* cheaper than the loops (and a lot more easily packed for a trip). Perhaps the loop advocates are unwilling to admit they might have been somewhat misled by the advertising claim ?

--

While (its_not_working())
 mess_with_it();

John Welch, N9JZW
jjw@seastar.org

End of Info-Hams Digest V94 #702
